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Skew Selection Theory Applied to the Wealth and Welfare of Nations

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According to skew selection theory, working citizens who build wealth and, at the same time, share portions of their wealth with those in need are more likely to survive economic downturns than citizens who hoard wealth. In this article, skew selection is employed as a theoretical framework to support governmental efforts to develop social policies that protect the income of working citizens and, at the same time, provide for vulnerable, non-working children and elders. To illustrate its applicability, the social policies of Japan, Sweden and the United States—all of which are challenged by decaying ratios of working to non-working citizens—are compared through the lens of skew selection. Policy recommendations are discussed.

Key words: *comparative social policy, social welfare, Japan, Sweden, United States, bioeconomics*

"If the misery of the poor be caused not by the laws of nature, but by our institutions, great is our sin."
Charles Darwin, 1839/1989, p. 2

Skew selection, an economic theory based on biological principles, models competition and cooperation as two self-interested survival strategies used by animals to cope with two agents of death—scarcity and aggression (Cassill 2003, 2006).

According to skew selection, the duality of human behaviors, competition and compassion, has been shaped over evolutionary time by scarcity and aggression respectively. In today's world, competition can be measured by wealth building and compassion by wealth sharing.

In this article, we present skew selection as a theoretical framework to validate the dual roles of government: promoting wealth building, and at the same time, promoting wealth sharing. Specifically, we propose that skew selection theory can support governmental efforts to develop social policies that protect working citizens and, at the same time, provide for dependent children and frail elders. First, we explain skew selection theory and then we use the comparative examples of Sweden, Japan, and the United States to apply the theory to governmental social policies. Finally, using the tenets of skew selection theory, we discuss how the wealthiest country, the U.S., can better manage its three most important resources: its children, its workers, and its elderly.

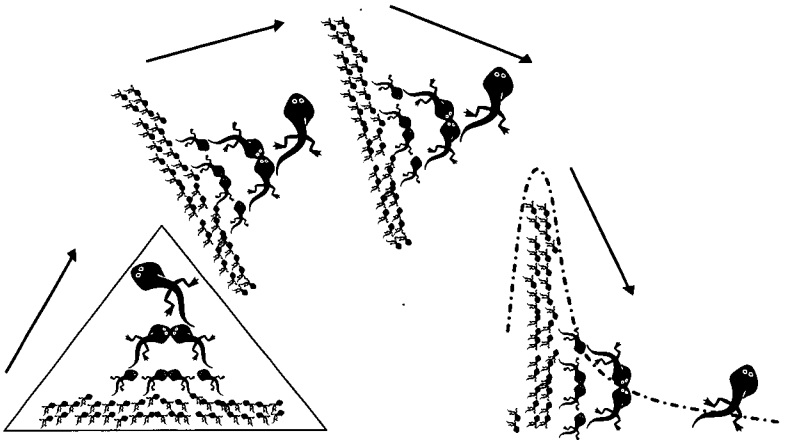
Skew Selection Theory

In nature, the two organizing principles shape animal behavior. They are aggression by predators and cycles of food abundance and scarcity. In humans, the source of scarcity is lack of income; the source of aggression is stealing, murder or war by other humans. Skew selection theory posits that an individual's most successful response to the dual threats of scarcity and aggression is a curious combination of wealth building and wealth sharing (Cassill, 2006; Cassill & Hill, 2007; Cassill & Watkins, 2004). The combination of wealth building and wealth sharing reduces inequality, but does not eliminate it, as the donor always keeps more than he or she gives away.

Skew selection equates income inequality to diversity, not poverty. Diversity and poverty are independent conditions. By themselves, diversity and inequality do not cause poverty. Likewise, uniformity and equality do not eliminate poverty. We can be equally or unequally poor, and equally or unequally rich. In reality, chronic poverty is a uniquely human condition. The causes are political, not environmental. Thus, just as Darwin (1839/1989) feared, "great is our sin" (p. 2).

For skew selection theory, inequality equates with diversity. To illustrate, in Figure 1 animals are first grouped vertically into an organizational hierarchy based on their diverse body sizes. Tip the hierarchy on its side, and the same animals become grouped horizontally as a histogram displaying inequality of body size. The point is this: the foundation of diversity—a good thing—is inequality.

Figure 1. Animals grouped into two graphic forms to illustrate the interchangeability of inequality and diversity



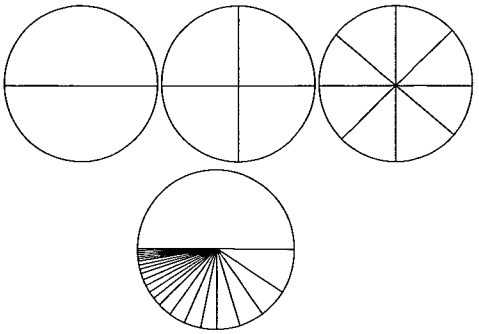
What is the proof that skew selection, which describes the inherent diversity among animals, is a superior distribution pattern to parity and equality? Skew theory has its roots in the study of social insects, particularly ants. Mature ant queens skew the fertility of their offspring, producing hundreds of large fertile daughters called virgin queens, and thousands of small sterile daughters called workers in a 1:20 ratio. The role of the thousands of sterile workers is to feed, shelter and defend their fertile sisters and their queen mother (Cassill, 2006). Skewing the size and fertility of daughters is an incredibly successful allocation strategy as ant queens are known to live 20 to 45 years—longer than cats, dogs or horses. A recent study discovered that mated queens skew the social status of their fertile daughters, the virgin queens, as well (Cassill, Kuriachan, & Vinson, 2007). Dominant virgins are large. Once

they disperse from the natal nest and have mated, they lay significantly more eggs per day than their smaller, subordinate sisters. Dominant and subordinate queens survive significantly longer when they found a family together, in one nest, and share resources than when they found a family alone, in separate nests. Pooling their resources (their labor force of sterile workers) increased their longevity and their individual fecundity (equivalent to wealth) two-fold. In Figure 2, we see that skewing offspring size and fertility allows ant queens to increase group size without jeopardizing the body size of virgin queens.

Other examples of wealth building and wealth sharing are found in human DNA, sperm, body cells, institutions and political philosophies. In humans, more than 97% of DNA sequences have no function. These non-functional DNA sequences, called junk DNA, do not produce the proteins (enzymes or structural proteins) that determine our body's form and function. According to skew selection theory, the junk DNA sequences shield the functional DNA sequences, called genes, from invading viruses (Cassill, 2005). With so much junk DNA, the probability that an invading virus will disable a functional gene sequence is close to zero. Thus, the wealth-building genes (functional DNA) are significantly more likely to survive and reproduce when they share shelter and nutrients with non-functional DNA sequences.

Cells in the testes of human males produce two kinds of sperm—healthy, high-energy sperm and sluggish, low-energy sperm. Only a small portion of sperm, often fewer than 10%, has sufficient energy stores (i.e. wealth) to complete the ten-hour swim from the vagina to their goal—the egg. Why would nature skew sperm ability? The answer lies in the vagina. Vaginas are a tropical paradise, providing nutrients, warmth and shelter for billions of microbes in the form of bacteria, protozoa, and fungi. The large number of low-energy (i.e. poor) sperm form a living barrier within which the few well-provisioned (i.e. wealthy) sperm can hide, and thus avoid death by the vagina's predatory microbes. In a nutshell, a large number of disposable sperm guarantees that at least one healthy sperm will reach an egg.

Figure 2. When resources are divided equally among offspring, parents must sacrifice offspring body size to gain litter size. When resources are skewed, meaning that they are divided unequally among offspring, parents can gain litter size without sacrificing body size.



Wealth building and sharing occurs among other body's cells as well. Once the egg is fertilized by the sperm, this single, omnipotent cell, called a zygote, replicates, divides and differentiates into two kinds of body cells—mortal and immortal. Numerically, the difference is extreme. During their lifetime, females produce hundreds of immortal eggs; males produce billions of immortal sperm. But, the number of immortal cells is nothing compared to the trillions and trillions of mortal cells, called somatic cells that make up a human's organs, tissues and bones. Curiously, in humans and other animals, somatic cells are programmed to die. When somatic cells stop producing replacement cells, organs shrink and eventually fail, causing the death of the organism (if that organism has not already succumbed to disease, predators or starvation). Only the eggs and sperm, the germ cells, are immortal, and are thus able to replicate themselves, creating generation after generation of organisms. Richard Dawkins (1976) was amazingly intuitive when he wrote that a chicken is an egg's way of making another egg.

Can we apply the lessons learned from ants, DNA, sperm and cells to humans? We think so. If wealthy donors do not redistribute some of their excess wealth, the poor cannot survive on their own. On the other hand, without the poor, wealthy

donors would not survive periods of high aggression (i.e. war). Thus, wealth-building and wealth-sharing are reciprocal, not opposing, strategies by which wealthy donors and needy recipients benefit in terms of survival and longevity.

Stated a different way, wealth building and wealth sharing doubly indemnify individuals against job loss and aggression. Both donor and recipient live longer and happier compared to those who hoard and do not share when income is scarce. Hence, even our most cherished moral behavior—helping those who cannot help themselves—is self-interested mutualism rather than self-sacrificing altruism.

Families, military institutions, academic institutions and corporations are microcosms of skew selection at work. Diversity of members among family, military, academic or corporate institutions is a hierarchy of inequality (Figure 1). In each case, a few highly experienced members oversee the efforts of the many, less experienced members. Families, military institutions, academic institutions and corporations build and share their wealth by fostering the young and inexperienced and then moving them up the hierarchical ladder based on their productivity and performance. Those that are unproductive remain in their current positions within the hierarchy indefinitely. These individuals are the most vulnerable members of the hierarchy, and without knowing it, serve to buffer those further up the hierarchy from outside agents of death or destruction—those unpredictable acts of nature. Although unpredictable acts of nature can wound institutions, they rarely destroy them. Destruction usually occurs from within when institutions fail to encourage wealth building and wealth sharing among their members.

How do these examples relate to government's role in promoting social policy? In a capitalistic democracy, income inequality is a natural result of variation in an individual's luck, motivation, and ability (Cassill & Watkins, 2004). When those who gain wealth share with those in need, both donor and recipient live longer (Cassill & Watkins, in press). This is largely supported by studies of life expectancy in countries with varying levels of income equality (Gudrais, 2008). The role of government is to maintain a healthy balance between wealth building and wealth sharing. The degree to which

governments promote wealth building and wealth sharing depends on their country's history, demographics, geography, economies, and neighbors. When economies are growing and aggression is low, able-bodied citizens are free to accumulate wealth to the best of their ability and motivation. When income is scarce and aggression high, it is the responsibility of wealthy citizens to share increments of their wealth with those in need (Hill & Cassill, 2004; Cassill & Hill, 2007). The role of government is to reasonably tax the wealthy and reasonably direct the redistribution.

There are examples throughout history of abuses by the "powerful and privileged" (Ehrlich & Lui, 1999; Haile, Sadrieh, & Verbon, 2003). Currently, with the recent crash of Wall Street and banking institutions, and the resulting deep recession in the U.S., we are acutely aware of the foible of focusing primarily on wealth building. The shortsighted greed by such corporations as Enron, Arthur Andersen, and WorldCom and the excesses of CEO compensations and unregulated loans have resulted in the collapse of a once invincible U.S. economy (Cassill & Hill, 2007). The move toward corporate social responsibility is healing the damage that unchecked greed created (Hill & Cassill, 2004). Therefore, it is important to differentiate between benign wealth building and malignant wealth building (Hill & Cassill, 2004; Vehrencamp, 1983).

Benign wealth building involves stockpiling during seasons when resources are super-abundant and builds capacity for wealth sharing when resources are scarcer. Malignant wealth building is an anti-Robin Hood strategy of "taking from the poor and giving to the rich" as seems to be occurring as main street U.S. is bailing out Wall Street via a trillion dollar "rescue plan" approved by the U.S. Congress in October, 2008. Governments and corporations that engage in malignant wealth-building will eventually suffer, as it is not balanced with wealth sharing. Those institutions that share not only survive longer, they prosper compared to those that hoard (Cassill & Watkins, in press).

However, a singular focus on wealth sharing to reach parity can be just as shortsighted and destructive as a singular focus on wealth building. During the 20th century, the mass starvation of tens of millions of humans in the Soviet Union

and China was a direct result of their philosophy on the power of parity, also called communism (reviewed in Tulchinsky & Varavikova, 1996; Deininger, Jin, & Yu, 2007). Public funds were distributed to the poor, mostly rural, populations, irrespective of the quality and quantity of work that they produced. Incentives for food stockpiling were gone. When natural disasters struck, food had not been sufficiently stockpiled (or was not distributed where needed). Famine reigned; death resulted.

Skew Selection Theory Applied to Governments

Wealth building and wealth sharing are complementary strategies for surviving dynamic environments such as those experienced by today's developed nations. Developing governmental policies that promote wealth building and wealth sharing to protect workers and non-workers is a challenge for any government. The challenge is exacerbated by the fact that health and wealth is a moving target that can shift repeatedly throughout one's lifetime from dependent childhood through independent adulthood to dependent late adulthood, as citizens are born, mature, and age. Developed countries, such as Japan, Sweden, and the United States, are facing a burden resulting from their wealth. Namely, citizens are living longer and, at the same time, families are having fewer children. Consequently, the proportion of non-working citizens is increasing at the same time that the proportion of working citizens is decreasing (Anderson & Hussey, 2000; Castles, 2003; Ozawa, 1999). In short, the challenge that these governments face is a decaying ratio of working to non-working citizens.

Several factors have contributed to the decay in the ratio of working to non-working citizens. Low birthrates, often short of the two needed as a replacement rate for workers, have led to a lower portion of maturing citizens entering the work force (Anderson & Hussey, 2000; Castles, 2003; Martin & Kats, 2003). At the same time, the number of dependent elders has increased because of early retirement, better health care, greater longevity, and medically extended periods of dying (Anderson & Hussey; Harper, 2006; Shea et al., 2003). Adding to the decaying ratio of working to non-working citizens is the fact that lower rates of marriage, higher rates of divorce, and two

working parents have led to a larger number of women entering the workforce (Martin & Kats, 2003). Although the addition of working women is beneficial for a government's economy, there is a double-edged downside. First, the low-wage jobs they perform means that a larger number of dependent children are in need of services, such as government-subsidized or government-run child care facilities (Allen, 2003; Mahon, 2002; Palley & Bowman, 2002). Second, as women enter the work force, they are no longer available to care for their older relatives (Harper, 2006). Consequently, the government takes on more responsibility to pay for the care of frail elders (Mahon, 2002; Shea et al., 2003).

Table 1. Economic Profiles of Japan, Sweden, and the U.S.

	Japan	Sweden	U.S.
Total GDP in millions, international $ [b6]	$3,943,754	$280,305	$12,409,460
GDP per capita, international $ [b6]	$30,821	$31,062	$41,854
Social expenditure as a % of GDP [a2]	16.89	28.92	14.78
Gini index (a measure of income skew) [d]	38.1[3]	25[1]	45[5]
Taxes as a percentage of GDP [c4]	25.3	50.6	25.6

Sources: [a]Social Expenditures as a Percentage of GDP, 2005 (Columbia University); [b]United Nation Statistics Division—Common Database, 2007; [c]Tax Policy Center, n.d.; [d]CIA, 2007
Year of data: [1]2000; [2]2001; [3]2002; [4]2003, [5]2004, [6]2005

We describe the demographics, economics, and social policies in three developed countries—Japan, Sweden, and the U.S.—in order to apply the principles of skew selection. These countries were selected because they are all wealthy nations facing the challenge of a shrinking ratio of working to non-working citizens. However, the demographic and socio-cultural characteristics of Japan, Sweden, and the United States are different and each government's response to the decaying ratio of working to non-working citizens in terms of their

policies for wealth building and wealth sharing is unique. The goal of our analysis is to compare the current priorities of each government for protecting the income of wealth builders and, at the same time, providing for its vulnerable citizens through wealth sharing. We first compare these nations in terms of gross domestic product (GDP), taxes, and demographics. Then we compare their social policies for protecting dependent children and frail elders. Our intention is not to provide answers, but rather to provide a sensible framework upon which governments can analyze and adjust social policies to protect their greatest resource—their working and non-working citizens.

Wealth and Welfare of Citizens

Table 1 presents economic profiles of Japan, Sweden, and the U.S. Despite large variations in total GDP, the GDP per capita is roughly equivalent among U.S., Japanese and Swedish citizens. Although the GDP per capita tells us that citizens of each country are equivalently productive, it tells us little about the spread of wealth among its citizens. To compare wealth, other indicators are needed. The Gini index is an indicator of wealth building. Tax rates and social expenditures as a percent of the GDP are indicators of wealth sharing. Using these metrics, we find dramatic differences in the wealth and poverty of U.S., Japanese and Swedish citizens. According to the Gini index, if the poorest 20th percentile of citizens in the U.S., Japan and Sweden averaged $10,000 a year, then the wealthiest 20th percentile of citizens per country averaged $450,000, $381,000 and $250,000 respectively. Wealthy U.S. citizens are 18% wealthier than Japan's wealthy citizens and 80% wealthier than Sweden's wealthy citizens. The U.S. has the greatest degree of income inequality among its citizens (see Gudrais, 2008; Phillips, 2002). By itself, a large gap in the distribution of wealth is not a "bad" thing. If a country's poverty rates are low (i.e. the vast majority of citizens are well cared for), then income inequality is benign and extreme wealth is harmless. Indeed, wealth is essential if we are to remediate the triarchy of poverty: famine, disease and illiteracy. It is poverty, rather than wealth, that is the shame of governments.

How do responsive governments redistribute wealth to fund programs for non-working citizens—young and old—

without discouraging its working citizens in their quest to build their own wealth? From the beginning of human time, socially responsive individuals have shared portions of their wealth with those in need (Hill & Cassill, 2004), as have religious institutions. More recently, socially responsive corporate institutions have developed wealth-sharing programs (Hill & Cassill, 2004; Cassill & Hill, 2007). However, by far the most powerful and influential institution for building and redistributing wealth to remediate poverty is government. Its method of choice for wealth building is the tax rate. Its method of wealth sharing is a matter of social policy and allotment of expenditures. Governments may promote the social welfare of citizens by increasing expenditures on institutions to benefit them, such as education and training, or by reducing expenditures on institutions that could do individuals harm, such as prisons.

Table 2. Demographic Profiles of Japan, Sweden, and the U.S.

	Japan	Sweden	U.S.
Population (in thousands) [a6]	127,687	8,993	293,623
Foreign population as % of total [b4]	1.5	5.3	11.5
% over 64 years old [b5]	19	17.2	12.3
% under 15 years old [b5]	15	17.9	20.9
Fertility rate [c]	1.33[3]	1.65[4]	2.03[3]
Births to unmarried women as % of all live births [c2]	1.6	33.2	55.3
Life expectancy at birth [c]			
Male	76.1[4]	75.4[4]	74.4[3]
Female	82.2[4]	80.8[4]	79.8[3]
Poverty rate			
Overall	15.3[d1]	6.5[e2]	17.0[e2]
Over 64 years old	19.5*[d1]	2.1[e2]	28.4[e2]
Under 18 years old, All	14.3[d1]	3.8[e2]	18.8[e2]
Under 18 years old, Single parent households	na	11.3[e2]	41.4[e2]

Sources: [a]United Nations Statistics Division—Common Database, 2007;
[b]Demography in OECD Countries, 2005 (Columbia University);
[c]Health Indicators i[e]n OECD Countries (Columbia University);
[d]Tachibanaki, 2006; [e]Smeeding, 2005
Year of data: [1]late 1990s; [2]2000; [3]2001; [4]2002; [5]2003, [6]2004 Note: *Ages 66-75

Comparing tax rates among our three countries, we find that the country with the least wealth, Sweden, has the highest tax rate—twice that of the U.S. and Japan—and the highest social expenditure. These data suggest that the U.S. and Japan emphasize wealth building more than wealth sharing, whereas Sweden emphasizes wealth sharing more than wealth building "to further the goal of social equality" (Blomqvist, 2004, p. 151). The important question is—does wealth sharing in the form of allotment of social expenditures result in reduced rates of poverty? Before we address the relationship between wealth building, wealth sharing, and poverty, we must review the differences in the demographics of each country.

Demographics

Demographic factors, which directly affect the social policies governing wealth building and sharing, vary among the three countries as shown on Table 2. The U.S. has more than twice as many foreigners as Sweden and more than 10 times as many as Japan. In short, the U.S. has a significantly larger and more diverse citizenry than Japan and Sweden. If diversity is sanctioned and embraced, it can strengthen an economy and enrich a nation's culture; on the other hand, if diversity is compartmentalized and vilified, it can become a source of poverty. In fact, it may be that in nations or even neighborhoods where there is greater diversity there is more reluctance to share wealth for the common good of those unlike oneself (Gudrais, 2008).

Compared to the U.S., Japan and Sweden have a larger proportion of elderly citizens (Anderson & Hussey, 2000) and a faster rate of aging citizens. Since 1970, the percentage of elderly citizens in Japan has almost tripled from 7% to 19% (Hashimoto & Takahashi, 1995; Demography in OECD Countries, 2005). This dramatic increase was fueled by Japan's longer life expectancy for both men and women. Likewise, the percentage of elderly citizens in Sweden has almost tripled to 17.2% of its population (Demography in OECD Countries, 2005), although Sweden's citizens took 85 years to age compared to Japan's 30 years (Hashimoto & Takahashi, 1995).

The rapid increase in the proportion of elderly citizens

has contributed significantly to the declining ratio of working to non-working citizens. In response to the declining ratio, Sweden and Japan have developed social policies to increase the work force by encouraging women to participate and, at the same time, to bear more children (Allen, 2003). Sweden is slowly reversing its downward trend in fertility rates into the 21st century (Castles, 2003). On the other hand, despite these social policies, Japan's fertility rate and the percentage of children have continued to decline into the 21st century (Segal, 2004).

Compared to Sweden and Japan, the U.S. has a large proportion of children and a high fertility rate (Martin & Kats, 2003). Childbearing is greatest among U.S. teens and unmarried mothers, placing significant pressure on the government to help children in low-income households headed by teens or single mothers. In response to this need, U.S. social policies are targeted at promoting marriage and discouraging childbearing by teens and other unmarried mothers (Brotherson & Duncan, 2004).

Wealth Redistribution to Children and Elderly Citizens

In developed countries, poverty is a function of social policy (Bradshaw, 2006). In the U.S., child poverty rates are five times higher than they are in Sweden (see Table 2). Close to half of U.S. children being raised in single parent families live in poverty. From the authors' perspectives, this is an embarrassing commentary on one of history's most wealthy and compassionate countries (Conley, 2003). An important factor may be that in the U.S. support for children is viewed as the responsibility of parents rather than government (Grason & Guyer, 1995). Because of the hands-off approach on matters of child and family poverty, programs for children of the U.S. are not universal. Programs that are available target only the very poorest children. As a consequence, U.S. government programs for children are often highly stigmatized. Moreover, they are ineffective, decreasing the high rate of child poverty only a few percentage points (Impact of Taxes and Transfers, 2005).

Given its wealth, the U.S. can afford to vanquish the triarchy of poverty, disease and illiteracy by funding basic nutrition, health care and education for all of its children. If

the U.S. government does not respect and nurture its children, poor and otherwise, it is damaging the upcoming generation of working citizens, as today's children are the hands that will eventually build the wealth needed to provide for today's working citizens as they transition into elders.

In Sweden, the government has reduced child poverty 74% by implementing cash benefits to families (Bradshaw, 2006). In Japan, government policies have also reduced child poverty considerably (Segal, 2004), though to a lesser extent than in Sweden. When we analyze the high rates of wealth and the high rates of child poverty in the U.S. through the lens of skew selection, it is easy to see that the U.S., for all its wealth, does not promote wealth sharing to its vulnerable citizens to the degree that Sweden and Japan do. Social policies emphasizing some form of universal health care for children and families, like those in Sweden and Japan, could ameliorate poverty rates in the U.S.

What about poverty among the elderly? In contrast to child poverty in the U.S., which is viewed by the government as the responsibility of families, programs for elderly U.S. citizens are viewed as the responsibility of government (Grason & Guyer, 1995). As a result, social policies for the elderly in the U.S. are more universal. "The elderly...enjoy universal entitlement to national health insurance through Medicare, a uniform-level of income security, and an organized system of community-based health, nutritional, and social support services" (Grason & Guyer, 1995, p. 567). Despite the overall high rate of funding for the elderly in the U.S., there remains a high level of poverty, particularly among single, elderly female citizens (Anderson & Hussey, 2000). Nevertheless, because U.S. policies for its elderly citizens are universal, the elderly are better protected than children are during times of high unemployment and economic strain (Axinn & Stern, 1985; Pati, Keren, Alessandrini, & Schwarz, 2004).

In Japan, the elderly receive an even higher rate of funding, including universal health care, than do the elderly in the U.S. (Anderson & Hussey, 2000; Lynch, 2001). In Sweden, funding for its elderly citizens continues at a lower rate relative to the U.S. or Japan (Lynch, 2001), even though Sweden devotes a larger percent of the GDP to social spending than do Japan

or the U.S. Still, poverty rates for Swedish elders are low. A contributing cause might be that working citizens have increased their contributions toward social insurance pensions (i.e. 7% percent of personal income; 9% of earnings) [Palley & Bowman, 2002]. With its aging population and its declining birth rate, too little wealth building combined with too much wealth sharing has created a strain on Sweden's ability to meet its obligations to all its citizens. Today, Sweden is re-evaluating its social policies, including social insurance pensions.

Discussion

In nature, there is power in wealth and there is power in numbers. Wealth building in the form of body fat, food caches or defending prime territories are examples of how organisms bridge gaps in resources. Wealth sharing to attract crowds allows organisms to avoid predators. Herein, we hold that these laws-of-nature apply to governments as well. When corporate environments are dominated by recessions and takeover bids (the equivalent of famine and predation), the wealthy and the masses depend on the government for long-term survival by redistributing some wealth to those in need. Indeed, the wealthy that ignore the numerical power of the masses not only lose labor and future profits, they expose themselves to predatory takeover. Likewise, the masses who overthrow the wealthy profiteers lack the ability to attract funding to rebuild the corporate structure that employed them. Several governmental policies have been proposed to avoid investor abuse or worker slackness (Cassill & Hill 2007): (1) transparency of investor identities; (2) transparency of corporate goals, objectives and means; (3) two-way communication up and down the corporate hierarchy that includes collective bargaining for employees; and (4) the purchase of *a priori* corporate malpractice insurance rather than *post priori* bankruptcy for failed corporations. To fund these strategies, wealth builders might forego an increment of annual profit, although this will be offset by significant gains in a corporation's long-term survival, stability and lifetime profits.

Diverse institutions, including governments, corporations, and universities, have a life span just as do individuals.

Thus, institutions are subject to the laws of natural selection. For example, governments risk loss of citizens if they do not evolve and adapt to changing conditions. Recent animal experiments and computer simulation experiments (Cassill et al., 2007; Cassill & Watkins, 2004; Cassill & Watkins, in press) confirmed that income skew is a predictable and natural result of building wealth when resources are abundant. The experiments also confirmed that wealth sharing increases the life span of both donors and recipients.

Given that wealth building and wealth sharing are reciprocal survival strategies, we assert that wealthy institutions that promote the ability of working citizens to acquire wealth and, at the same time, facilitate the responsibility of those same citizens to share increments of their wealth with others in need, are more robust to economic downturns and aggression than are institutions that advocate for one without the other. Indeed, institutions that ignore the misery of the poor are not only culturally immoral, they are biologically and economically unsustainable (Cassill & Watkins, in press).

When the ratio of working to non-working citizens declines, governments must make some hard choices. To counter its declining ratio of working to non-working citizens, one approach is for developed countries, such as Japan, Sweden and the U.S., to remove disincentives and/or offer incentives for the elderly, who are living longer and healthier, to retool their skills as needed and work more years (AARP, 2006; OECD, 2000). As a nation with a high proportion of children in poverty, the U.S. should consider universal programs for children more in line with U.S. policies for older adults (Grason & Guyer, 1995; Newacheck & Benjamin, 2004; Ozawa, 1999).

As members of one of the wealthiest countries in the world, we consider the misery of U.S. children our greatest shame. Shortchanging children today shortchanges the ability of those same children to grow into adults who will generate wealth tomorrow. Likewise, shortchanging the elderly today denies them their just reward for their tax contributions to the welfare of others (Dalley, 1999). Sweden, Japan and the U.S. are remarkable democracies with the capacity to promote the freedom of working citizens to acquire wealth and, at the same time, to assure their responsibility to protect those in need.

In conclusion, we challenge wealth builders—governmental policymakers, corporations, and individual philanthropists—to embrace wealth sharing as a 21st century goal. Let us follow the lead of the Carnegies, the Rockefellers, Ted Turner, Bill Gates, Carl Venter and Brad Pitt in not only redistributing wealth through conspicuous consumption, but by investing in our young and elderly when they are in need.

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